ABSTRACT OF THE DISCLOSURE

In an MPEG-2 decoder (2), a variable length decoder (2A) carries out syntax analysis of input compression data (1) according to the MPEG-2 standard, and generates coding mode

5   information (3), motion vector information (4) and prediction residual signal (2B). The prediction residual signal (2B) is transformed to a decoded picture (5) through a dequantizer (2C) and the like, and is supplied to an MPEG-4 encoder (10) via a resolution converter (6). In the MPEG-4 encoder (10), a coding

10   parameter deciding section (10B) decides a motion vector according to a prediction error estimation value for evaluating a prediction efficiency when using a motion vector candidate generated by a motion vector mapping section (7), and according to a value for evaluating a motion vector rate when using the

15   motion vector candidate.